



Docket No.: O0277.70001US00
(PATENT)

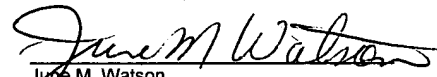
IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: Heather L. Davis et al.
Serial No.: 10/644,267
Confirmation No.: 6263
Filed: August 20, 2003
For: NUCLEOTIDE VECTOR COMPOSITION CONTAINING SUCH
VECTOR AND VACCINE FOR IMMUNIZATION AGAINST
HEPATITIS (TRAN FROM 7002)
Examiner: A. M. Falk
Art Unit: 1632

Certificate of Mailing Under 37 CFR 1.8(a)

I hereby certify that this paper (along with any paper referred to as being attached or enclosed) is being deposited with the U.S. Postal Service on the date shown below with sufficient postage as First Class Mail, in an envelope addressed to: Mail Stop Amendment, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

Dated: 2/23/07


June M. Watson

INFORMATION DISCLOSURE STATEMENT (IDS)

Mail Stop Amendment
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Dear Sir:

Pursuant to 37 CFR 1.56, 1.97 and 1.98, the attention of the Patent and Trademark Office is hereby directed to the references listed on the attached PTO/SB/08. It is respectfully requested that the information be expressly considered during the prosecution of this application, and that the references be made of record therein and appear among the "References Cited" on any patent to issue therefrom.

This Information Disclosure Statement is filed more than three months after the U.S. filing date, OR more than three months after the date of entry of the national stage of a PCT application, AND after the mailing date of the first Office Action on the merits, whichever occurs first, but before the mailing date of a Final Office Action or Notice of Allowance (37 CFR 1.97(c)).

02/28/2007 AWONDAF1 00000070 10644267

02 FC:1806

100.00 OP

In accordance with 37 CFR 1.98(a)(2)(ii), Applicant has not submitted copies of U.S. patents and U.S. patent applications. Applicant submits herewith copies of foreign patents and non-patent literature in accordance with 37 CFR 1.98(a)(2).

In accordance with 37 CFR 1.97(g), the filing of this Information Disclosure Statement shall not be construed to mean that a search has been made or that no other material information as defined in 37 CFR 1.56(a) exists. In accordance with 37 CFR 1.97(h), the filing of this Information Disclosure Statement shall not be construed to be an admission that any patent, publication or other information referred to therein is "prior art" for this invention unless specifically designated as such.

It is submitted that the Information Disclosure Statement is in compliance with 37 CFR 1.98 and the Examiner is respectfully requested to consider the listed references.

Our check in the amount of \$180.00 covering the fee set forth in 37 CFR 1.17(p) is enclosed. The Director is hereby authorized to charge any deficiency in the fees filed, asserted to be filed or which should have been filed herewith (or with any paper hereafter filed in this application by this firm) to our Deposit Account No. 23/2825, under Docket No. O0277.70001US00. A duplicate copy of this paper is enclosed.

Dated: February 23, 2007

Respectfully submitted,

By 

Helen C. Lockhart

Registration No.: 39,248

WOLF, GREENFIELD & SACKS, P.C.

Federal Reserve Plaza

600 Atlantic Avenue

Boston, Massachusetts 02210-2206

(617) 646-8000



PTO/SB/08A/B (09-06)
Approved for use through 03/31/2007. OMB 0651-0031
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Use as many sheets as necessary)			Complete if Known		
			Application Number	10/644,267-Conf. #6263	
			Filing Date	August 20, 2003	
			First Named Inventor	Heather L. Davis	
			Art Unit	1632	
			Examiner Name	A. M. Falk	
Sheet	1	of	3	Attorney Docket Number	O0277.70001US00

U.S. PATENT DOCUMENTS					
Examiner Initials*	Cite No. ¹	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number-Kind Code ² (if known)			
	A23*	US-4,710,463	12-01-1987	Murray et al.	
	A24*	US-4,803,164	02-07-1989	Hitzeman et al.	
	A25*	US-4,839,277	06-13-1989	Sugahara et al.	
	A26*	US-4,957,869	09-18-1990	Arnot et al.	
	A27*	US-5,786,189	07-28-1998	Locht et al.	
	A28*	US-6,635,624	10-21-2003	Davis et al.	
	A29*	US-20020142978-A1	10-03-2002	Raz et al.	
	A30*	US-20020192184-A1	12-19-2002	Carpentier	

FOREIGN PATENT DOCUMENTS						
Examiner Initials*	Cite No. ¹	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T ⁶
		Country Code ³ -Number ⁴ -Kind Code ⁵ (if known)				
	B7	WO-9728259-A1	08-07-1997	The Regents of the University of California		
	B8	WO-2005004910-A2	01-20-2005	Intercell Ag		
	B9	WO-2005039633-A1	05-06-2005	Mologen Ag		

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. * CITE NO.: Those application(s) which are marked with an single asterisk (*) next to the Cite No. are not supplied (under 37 CFR 1.98(a)(2)(iii)) because that application was filed after June 30, 2003 or is available in the IFW. ¹ Applicant's unique citation designation number (optional). ² See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached.

NON PATENT LITERATURE DOCUMENTS			
Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
	C56	ALPAR et al., Potential of particulate carriers for the mucosal delivery of DNA vaccines. Biochem Soc Trans. 1997 May;25(2):337S.	
	C57	BRANDA et al., Immune stimulation by an antisense oligomer complementary to the rev gene of HIV-1. Biochem Pharmacol. 1993 May 25;45(10):2037-43.	
	C58	CALAROTA et al., Cellular cytotoxic response induced by DNA vaccination in HIV-1-infected patients. Lancet. 1998 May 2;351(9112):1320-5.	
	C59	CHEN et al., Protective immunity induced by oral immunization with a rotavirus DNA vaccine encapsulated in microparticles. J Virol. 1998 Jul;72(7):5757-61.	
	C60	DAHESHIA et al., Immune induction and modulation by topical ocular administration of plasmid DNA encoding antigens and cytokines. Vaccine. 1998 Jul;16(11-12):1103-10.	
	C61	DAVIS et al., Plasmid DNA expression systems for the purpose of immunization. Curr Opin Biotechnol. 1997 Oct;8(5):635-46.	
	C62	ETCHART et al., Class I-restricted CTL induction by mucosal immunization with naked DNA encoding measles virus haemagglutinin. J Gen Virol. 1997 Jul;78 (Pt 7):1577-80.	

Examiner Signature		Date Considered	
-----------------------	--	--------------------	--

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT <i>(Use as many sheets as necessary)</i>				Complete if Known	
				Application Number	10/644,267-Conf. #6263
				Filing Date	August 20, 2003
				First Named Inventor	Heather L. Davis
				Art Unit	1632
				Examiner Name	A. M. Falk
Sheet	2	of	3	Attorney Docket Number	O0277.70001US00

C63	FIELDS et al., Fields' Virology. 2001;1:1153.	
C64	GALLICHAN et al., Specific secretory immune responses in the female genital tract following intranasal immunization with a recombinant adenovirus expressing glycoprotein B of herpes simplex virus. Vaccine. 1995 Nov;13(16):1589-95.	
C65	GEISLER et al., Enhancement of cellular and humoral immune responses to hepatitis C virus core protein using DNA-based vaccines augmented with cytokine-expressing plasmids. J Immunol. 1997 Feb 1;158(3):1231-7.	
C66	GRAMZINSKI et al., Immune response to a hepatitis B DNA vaccine in Aotus monkeys: a comparison of vaccine formulation, route, and method of administration. Mol Med. 1998 Feb;4(2):109-18.	
C67	HALPERIN et al., A phase I study of the safety and immunogenicity of recombinant hepatitis B surface antigen co-administered with an immunostimulatory phosphorothioate oligonucleotide adjuvant. Vaccine. 2003 Jun 2;21(19-20):2461-7.	
C68	HALPERIN et al., Comparison of the safety and immunogenicity of hepatitis B virus surface antigen co-administered with an immunostimulatory phosphorothioate oligonucleotide and a licensed hepatitis B vaccine in healthy young adults. Vaccine. 2006 Jan 9;24(1):20-6. Epub 2005 Sep 12. Abstract Only.	
C69	HAYNES et al., Particle-mediated nucleic acid immunization. J Biotechnol. 1996 Jan 26;44(1-3):37-42.	
C70	HEDLEY et al., Microspheres containing plasmid-encoded antigens elicit cytotoxic T-cell responses. Nat Med. 1998 Mar;4(3):365-8.	
C71	JONES et al., Poly(DL-lactide-co-glycolide)-encapsulated plasmid DNA elicits systemic and mucosal antibody responses to encoded protein after oral administration. Vaccine. 1997 Jun;15(8):814-7.	
C72	KLINMAN et al., Therapeutic applications of CpG-containing oligodeoxynucleotides. Antisense Nucleic Acid Drug Dev. 1998 Apr;8(2):181-4.	
C73	KUHOBER et al., DNA immunization induces antibody and cytotoxic T cell responses to hepatitis B core antigen in H-2b mice. J Immunol. 1996 May 15;156(10):3687-95.	
C74	LECLERC et al., The preferential induction of a Th1 immune response by DNA-based immunization is mediated by the immunostimulatory effect of plasmid DNA. Cell Immunol. 1997 Aug 1;179(2):97-106.	
C75	LEE et al., Immuno-stimulatory effects of bacterial-derived plasmids depend on the nature of the antigen in intramuscular DNA inoculations. Immunology. 1998 Jul;94(3):285-9.	
C76	MACGREGOR et al., First human trial of a DNA-based vaccine for treatment of human immunodeficiency virus type 1 infection: safety and host response. J Infect Dis. 1998 Jul;178(1):92-100.	
C77	MCCLUSKIE et al., Novel strategies using DNA for the induction of mucosal immunity. Crit Rev Immunol. 1999;19(4):303-29.	
C78	MCCLUSKIE et al., Novel adjuvant systems. Curr Drug Targets Infect Disord. 2001 Nov;1(3):263-71.	
C79	MCCLUSKIE et al., Mucosal immunization with DNA vaccines. Microbes Infect. 1999 Jul;1(9):685-98.	
C80	MCCLUSKIE et al., The role of CpG in DNA vaccines. Springer Semin Immunopathol. 2000;22(1-2):125-32.	
C81	MCCLUSKIE et al., Route and method of delivery of DNA vaccine influence immune responses in mice and non-human primates. Mol Med. 1999 May;5(5):287-300.	
C82	PAYETTE et al., History of vaccines and positioning of current trends. Curr Drug Targets Infect Disord. 2001 Nov;1(3):241-7.	

Examiner Signature		Date Considered	
--------------------	--	-----------------	--

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT <i>(Use as many sheets as necessary)</i>				Complete if Known	
				Application Number	10/644,267-Conf. #6263
				Filing Date	August 20, 2003
				First Named Inventor	Heather L. Davis
				Art Unit	1632
				Examiner Name	A. M. Falk
Sheet	3	of	3	Attorney Docket Number	O0277.70001US00

	C83	ROMAN et al., Immunostimulatory DNA sequences function as T helper-1-promoting adjuvants. Nat Med. 1997 Aug;3(8):849-54.	
	C84	RUBANYI, The future of human gene therapy. Mol Aspects Med. 2001 Jun;22(3):113-42.	
	C85	TACKET et al., Phase 1 safety and immune response studies of a DNA vaccine encoding hepatitis B surface antigen delivered by a gene delivery device. Vaccine. 1999 Jul 16;17(22):2826-9.	
	C86	UGEN et al., DNA vaccination with HIV-1 expressing constructs elicits immune responses in humans. Vaccine. 1998 Nov;16(19):1818-21.	
	C87	WANG et al., Induction of antigen-specific cytotoxic T lymphocytes in humans by a malaria DNA vaccine. Science. 1998 Oct 16;282(5388):476-80.	
	C88	WEERATNA et al., Reduction of antigen expression from DNA vaccines by coadministered oligodeoxynucleotides. Antisense Nucleic Acid Drug Dev. 1998 Aug;8(4):351-6.	
	C89	WEERATNA et al., CpG DNA induces stronger immune responses with less toxicity than other adjuvants. Vaccine. 2000 Mar 6;18(17):1755-62.	

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹Applicant's unique citation designation number (optional). ²Applicant is to place a check mark here if English language Translation is attached.

Examiner Signature		Date Considered	
-----------------------	--	--------------------	--